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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,535	11/03/2000	Rudy Bonefas	35825-164588	5575

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EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
2143	14

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/704,535	Applicant(s) BONEFAS ET AL.	
	Examiner Joseph E. Avellino	Art Unit 2143	

-- Th MAILING DATE of this communication appears n the cov r sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) *11-23, 34-46, 48-49* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10, 24-33, 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *7, 8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-10, 24-33, and 47 are presented for examination. Claims 11-23, 34-46, 48, and 49 are hereby withdrawn from consideration as being drawn to nonelected inventions.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 8, 24-29, 31, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (US Pre Grant Pub. 2002/0133573) (hereinafter Matsuda).

4. Referring to claim 1, Matsuda discloses a computer readable data storage medium comprising a software class for supporting a plurality of servers in an intelligent messaging network (i.e. a network 201), the class comprising:

a first code segment handling registration (automatic configuration, network addressing, service discovery) of NOA (networked office architecture) servers and clients with the intelligent messaging network (e.g. abstract; p. 5, ¶ 47-49);

a second code segment for connecting NOA clients/servers to one another (e.g. abstract; p. 8, ¶ 83-95) (it is understood that if a NOA client can utilize the services of another NOA client, then it is inherent that they are connected to one another);

a third code segment encapsulating communication between NOA clients (e.g. abstract).

Matsuda does not specifically disclose enabling communication between servers, however Matsuda does disclose that if a NOA server is not configured as a DHCP server offering configuration settings, it is registered as a NOA client, therefore it would lead one of ordinary skill to believe that multiple servers can communicate with one another using the system described in Matsuda, therefore it would have been obvious to one of ordinary skill in the art to provide for encapsulating communications between servers to the system of Matsuda to provide for enhanced communications abilities and for information sharing abilities.

5. Referring to claim 2, Matsuda discloses the first code segment (i.e. registration process) specifies a server class (i.e. a server priority) and a server type (i.e. Master, Temporary_Master, or Not_Master) (p. 6-7, ¶ 56, 61).

6. Referring to claim 3, Matsuda discloses the first code segment (i.e. registration process) specifies an IP address (p. 7, ¶ 65-66).

7. Referring to claim 4, Matsuda discloses the third code segment (i.e. network communication technique) generates a standard packet for communications between the servers (i.e. an HTTP packet since the NOA architecture is based on an HTTP network connected to the Internet 201) (p. 3, ¶ 37; p. 4, ¶ 40).

8. Referring to claim 5, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes includes a packet length (i.e. "Content-Length: XXXX").

9. Referring to claim 6, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes includes a server ID (i.e. an IP address of the server) so that it is known the source or destination of the packet).

10. Referring to claim 8, Matsuda discloses a code segment encrypting and decrypting messages (p. 10, ¶ 126-127), however does not specifically state generating acknowledgement messages, processing the acknowledgement messages, and

compressing and decompressing messages, however it is well known in the art that acknowledgement messages (known as ACK's) can be sent from destination to senders if a particular segment or message has not been received, and it is then inherent that both the destination computer and the sender computer can process the ACK message to determine what, if any, action must be done to rectify the situation (i.e. retransmit a segment, restart transmission, etc.). It is further common knowledge that code segments which compress and decompress messages is well known and expected in the art to save transmission processing and reduce overall bandwidth on the network communication link. Therefore it would have been obvious to one of ordinary skill in the art to provide for generating and processing ACK messages as well as compressing and decompressing messages to further reduce overall server processing and increase efficiency while reducing congestion over the network.

11. Claims 24-29, 31, and 47 are rejected for similar reasons as stated in the claims above.

Claims 7, 9, 10, 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda in view of Bell et al. (USPN 6,044,081) (hereinafter Bell).

12. Referring to claim 7, Matsuda discloses the computer-readable data storage medium as stated in the claims above. Matsuda does not disclose encapsulating a transport header, notifying a sender of a success or failure of a transmission,

segmenting messages over a pre-determined length into message segments, assembling messages segments into messages, resending messages not ACK'ed, detecting duplicate message segments, and detecting duplicate messages. Bell discloses:

encapsulating a transport header (MAC frame header) (col. 20, lines 24-33);

notifying a sender of a success or failure of a transmission (it would have been obvious to incorporate a failure notification mechanism to the sender when a frame check sequence error is detected to reduce bandwidth by halting transmission of unnecessary message segments and to retransmit pertinent segments) (col. 21, lines 20-30);

segmenting messages over a pre-determined length into message segments (encapsulation) (e.g. abstract; col. 20, lines 23-65);

assembling messages segments into messages (de-encapsulation) (col. 21, lines 30-51);

pacing a transmission of messages larger than a pre-determined number of segments (i.e. buffering messages and transmitting them in a queue) (col. 20, lines 20-25);

Bell does not specifically state detecting duplicate message segments or detecting duplicate messages, however does disclose that if a new message sequence number is received before the necessary last segment of the previous message, it will abort processing and return an error (col. 21, lines 20-30). Therefore it would have been obvious to one of ordinary skill in the art to provide code to detect duplicate

message segments and detect duplicate messages to the system of Matsuda-Bell to increase efficiency of the system by not wasting server processing time dealing with previously sent messages or segments.

13. Referring to claim 9, Matsuda discloses the computer-readable data storage medium as stated in the claims above. Matsuda does not disclose encapsulating a communication layer. Bell discloses encapsulating a communication layer (the Office takes the term communication layer to mean formatting a higher level message to be transmitted over a network) (col. 20, lines 23-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bell with Matsuda to provide an efficient bandwidth connection while providing a path from every node to every other node within a private network without requiring multiple physical connections for each node as supported by Bell (col. 8, lines 30-35).

14. Referring to claim 10, it is well known in the art that application specific messages can be processed by servers (i.e. serving a web page, a CGI script, SOAP execution module, etc.) to provide services required by the application to the client. Furthermore, it is well known in the art that specific servers may compress messages as a form of encryption in order to provide an enhanced level of security as well as reducing used bandwidth on a communication link. Matsuda discloses code providing special security services (i.e. passwords and database updating) (p. 10, ¶126-128).

15. Claims 30, 32, and 33 are rejected for similar reasons as stated in the claims above.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Day II (US Pre Grant Pub. 2002/0046260) discloses managing networked directory services with auto field population.

18. Bertram et al. (USPN 6,418,466) discloses management of authentication discovery policy in a computer network.

19. White et al. (USPN 6,301,012) discloses automatically configuring a network printer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (703) 305-7855. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JEA
June 30, 2003

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100